# **WASTE PRODUCTS** FROM CANNERIES MAY BE UTILIZED

Cherry Pits, Now Source of Annoyance, Can Be Made to Yield Valuable Oils.

## **NEW INDUSTRY IS POSSIBLE**

Specialists in U. S. Department of Agriculture Declare Also That 105,-000 Gallons of Juice Now Thrown Away May Be Converted Into Jelly and Sirup.

Washington, D. C .- Sixteen hundred annoyance and expense to canneries, nels under pressure, it is believed that can be made to yield two valuable oils 30 per cent or more can be obtained. added and the mixture allowed to States department of agriculture. In of solvents. addition, 105,000 gallons of cherry juice now wasted in seeding cherries can be turned into desirable jelly and sirup, or even into alcohol. A saving of these valuable by-products from cherry canning may make possible the domestic manufacture of substitutes and distillation. In the experiments of lime and concentrating it by evapfor almond oil and bitter-almond oil, the oil was obtained at the rate of oration and then settling or filtering now imported, and at the same time nearly one pound for every 100 pounds out the lime compounds. establish a new industry in the cherry of residue treated. It is estimated packing districts of the North Atlantic, North Central and Western states.

The specialists, however, have not yet carried their work to a point where they can say that the converting of this juice and the cherry pits would be a profitable side industry for the ordinary or smaller cannery. In cases where a number of canners are operating within a reasonable distance of one another, the specialists, however, believe that the waste products could be sent to a central co-operative or other plant at small cost and there utilized to advantage. Studies, how ever, are being carried on to determine whether means cannot be devised for making these waste products profitable also when handled on a small scale.

Some time ago there was similar investigation of the use of peach and apricot pits for making oils and meal, and a commercial enterprise has been established in California for dealing with these products. The department has published a bulletin on this subject and also one dealing with them which could readily be turned into a very desirable raisin sirup for the use of confectioners and others. After this pulp had been used it was found that an oil useful in the arts could profitably be pressed from the seed, and experiments are under way to determine whether the crushed seed could not be used to advantage in feeding stock.

The following description of these products, and methods which have been developed for making them, are taken from professional paper 350, "The Utilization of Cherry By-Products," by Frank Rabak, chemical biologist, bureau of plant industry

Fixed Oil From Cherry Pits. "The kernel of the pit, as long has been known, contains a considerable quantity of oil. Investigations recently conducted show that the oily constituents of the kernel can be converted into a fixed oil much like almond oil, and a volatile oil practically identical with oil of bitter almonds.

### RESCUES INSANE MAN



Miss Constance Kopp (right), the girl deputy sheriff of Bergen county. New Jersey, dived into the icy waters of the Hackensack river and rescued an invane man. He was revived by physicians. Miss Kopp was put to bed in charge of a nurse but went out a few hours later to attend to her duties. Tony Hojnacka was being taken from a hospital to the asylum in charge of Miss Koop when he escaped. On the left of the picture is Miss Kopp's ed leading the procession for the jail.

feed similar to linseed cake.

"The fixed oil is the most important it is so closely related to imported aland soap.

neighborhood of twenty cents a | \$12,000. pound. The best quality of this fixed oil is extracted from the kernels in hydraulic presses. The shells of the pits are first cracked in a mill and the uncrushed kernels separated out with sieves. The oil is then pressed out from the meats. In a laboratory ex-2,750 pounds to the square inch. On a commercial scale, however, with made by concentrating the cherry tons of cherry pits, now a source of presses equipped for heating the ker- juice with cane sugar in a vacuum. and also a meal for feeding cattle, ac- The oil also can be obtained by grindcording to specialists of the United ing the pits and extracting by means

> Volatile Oil Second Product. "The volatile oil, the second product, remains in the pressed cake after the fixed oil has been extracted by pres-

The residue after these oils are ex- based on the current prices for the tracted shows on analysis ingredients very similar imported bitter-almond that may make it a practical cattle oil, would be in the neighborhood of \$54,000.

"The press cake left after both fixed by-product of cherry pits. It has a and volatile oils have been removed, golden yellow color and a pleasant is believed to contain substances nutlike taste and odor. In character which may make it a desirable stock food. Its most important constitumond oil that it is believed to pos- ents, as shown by analysis, are fat, sess similar possibilities in the com- protein, including nitrogen compounds, mercial manufacture of drugs, 60s and sugar and other carbohydrates. The protein amounts to 30 per cent "If the pits of all domestic cherries, and in this the cake compares favornow thrown away at canneries, and ably with other stock foods. If cherry the pits extracted from imported cher- kernel meal proves in practice to be ries, were processed in this way it is as good for feed as the laboratory estimated that they would yield 320, analysis would indicate, the annual 000 pounds of fixed oil, worth in the value of this product would be about

Much Juice Is Wasted. "The 105,000 gallons of cherry juice wasted each year in the canneries, the experiments show, would, if collected and treated, produce 85,000 gallons of desirable jelly or a large quantity of table sirup, or could be made to ferperiment the kernels yielded 21 per ment and produce alcohol. In the excent of fixed oil under a pressure of periments a cherry jelly, bright red in color and with a fruity odor, was A small amount of gelatin was then cool. Other processes in which the concentrated juice is heated with pectin or fruits rich in pectin, the investigators believe might produce oven better results.

"The juice also could be made into some 21,000 gallons of an agreeably sure or by solvents. The volatile oil flavored table sirup by neutralizing is then secured by chemical means the acid in the filtered juice with milk

"The cherry juice, if fermented by that 6,000 pounds of this volatile oil the addition of yeast and then discould be obtained if all the cherry tilled, can be made to yield 36 per pits handled at canneries could be cent of absolute alcohol or about used. The value of this by-product, 5,000 gallons."

Illicit Dispensers of Liquor Busy in Dry Territory Along Mexican Border.

# WALKING BARROOM

Sook With Troopers at Columbus Peddles Refreshments From His Oaken Limb Until Officers Discovered Source of Supply.

Columbus, N. M .- Everywhere that the broad trail of the army leads, the the utilization of raisin seed from trail of the "bootlegger" parallels. Parthe seeded raisin industry. It was ticularly if the route of the troopfound that many tons of raisin seed ers lies through dry territory, the ilhad considerable fruit adhering to licit dispenser of the draft that sometimes cheera is a hanger-on And he has a million and one ways to evade the regulations.

The bootlegger arrived in Columbus about ten seconds after Uncle Sam's soldier boys. He did a profitable business, especially around pay day. Some of the troopers, disgruntled because they were forced to remain here inactive while their mates were playing hide-and-seek with Villa in the sand dunes, were intent on drowning their sorrows. Others celebrated their good fortune when they were ordered to cross the line.

"Pegleg" is, or was, a cook for the civilian employees of the quartermas- gressman Edward E. Browne of Wister's department. The name comes from his portside limb, which is of sturdy oak. After the troops arrived, Pegleg seemed always to be in the mood that can come only from looking on the wine when it is red. And he became surprisingly prosperous. His condition drew the suspicion of the army authorities.

Lieut. Austin M. Pardee of the Twentieth infantry, detailed as a provost marshal, decided that Pegleg would bear watching.

After several hours of watchful waiting he saw two troopers slide up to Pegleg's tent and in distinctly audible tones bid Pegleg to "set out the joy juice." Pegleg was complying when Lieutenant Pardee arrested the

"I won't go!" declared Pegleg, and promptly lay down.

"Get two men to carry him," sug-

gested a sergeant. "Get nothing," decided Lieutenant Pardee. "You fellows take off his pants and his log, and lot him tie there. He won't escape on one leg, that is certain.'

Pegieg protested vigorously, but it availed him nothing. The pants came off, likewise the leg, and with the latter came the secret of Pegleg's success at dispensing.

The leg was hollow, lined with tin, and held at least a half a gallon of liquor. Pegleg, his stores combacated and

desert, was landed on an castbound freight. Half an hour later Lieutenant Pardee saw a white-haired, venerable-

poured into a dry but unappreciative

looking old gentleman alight from an eastern passenger train. He carried a suitcase. Two soldiers greeted the old man

affectionately. "Got anything good?" queried Lieutenant Pardee.

"S-s-s-h-h; it's six bits a bottle. got to get big money because its risky business here," replied the aged

"So it is," commented the lieutenant as he took the suitcase and start-Since the troops have been here,

dozens of suitcases have been confiscated in a like manner. Columbus is strewn with broken bottles-their contents having wetted an arid des-

#### MISS KATHERINE BROWNE



Miss Browne is the daughter of Conconsin. She is a student at the University of Wisconsin.

### CO-ED GOWNS ARE CENSORED

Same Girl- Sent Home From Dances -- Frocks Are Too Low at Top or Too High at Bottom.

Bloomington, Ind.—The Indiana unlversity authorities have established a censorship of clothes worn by the "co-

The censorship is in charge of Miss Ruby C. E. Mason, dean of women, who is attending all dances and inspecting the frocks and gowns. If the evening gowns of the girls do not conform to regulations as to length and style, the wearers are sent back to their rooms for a change of attire. This has happened to several young women recently. The censorship is established because of the loyalty of the Indiana "co-eds" to the prevailing styles, especially in dancing frocks. The frocks have been cut so low from the chin and so high from the ground that they have been shocking to some, the university authorities say, all during the winter.

### GIRL RIDES BLIND BAGGAGE

June Giemen Says Woman Will Do Anything for the Men She Loves.

San Jose,-June Giemen, held here on a charge of grand larceny, told Deputy Sheriff Buffington that with Louis Long, who is also here, and seven other men, she had ridden the blind baggage from Salinas to San Luis Obispo, peddling stolen goods as opportunity offered. Her explanation of her implication in the robbery was, "You will do snything for the man you love."

Rate Lower for Stepmothers. Harrison, N. J.-Joseph Gendiski, arrested for "kicking his mother," was fined \$20. The woman said she was not John's mother, but his stepmother. "Then make the fine \$10," decreed the court.



#### INCREASING VALUE OF LANDS

Immense Uncultivated Area Cannot Be Developed Until Improved Highways Are Constructed.

There are over 400,000,000 acres of uncultivated land in the United States awaiting development that cannot be developed without improved highways. It has been shown that the value of land is increased evenly with the improvement for the roads, the increase running from \$2 to \$9 the acre. As the roads are improved, there is a corresponding increase in population. In twenty-five countles, taken at random, which have contained on an average only 11/2 per cent of improved roads in the decade 1890 to 1900, there was a falling off in population of 3,000 in each county. In twentyfive other counties, taken at random, in which there was an average of 40



Good Road in Nebraska.

per cent of improved roads, the increase of population in each county was 31,000. The 'back-to-the-farm' movement will progress just in proportion to the improvement of the highways, and the improvement of the highways is dependent upon administration not less than upon construction.

There must be skill in the supervision as well as in the building of the roads. Heretofore at least ninetenths of the work on the roads has been done under the direction of men without any knowledge of roadbuilding, which is an art based upon a science. There are today more than 100,-000 petty road officials in the United States who have no practical knowledge of the simplest engineering problems that must be solved in the location of the roads, in their relation to a general systsem, or to related systems; but who are supposed to have great influence in neighborhood politics and are mighty at the polls. It is from this incubus that the problem must be relieved if the country is to enjoy the benefits of a well ordered system of highways.

Good roads not only cost a great deal of money in their construction, but also in their maintenance or administration. It has been the habit in this country to 'work on the roads' when all other work was done, and this has meant that the roads have had attention only once or twice a year. Macadam roads do not take care of themselves, concrete roads should have constant attention, sandclay roads require daily supervision if they are to give service for which they were designed and built. In France every mile of road is inspected daily, and it is the constant vigilance of trained supervision that enables the railroads of the country to take care of the business of the country. There ought to be the same sort and degree of supervision of the roads of the United States if they are to give the service for which they are built. To make a mile of macadam road eight feet wide and eight inches thick, 1,750 tons of stone are required, and to build a mile of gravel road eight feet wide and eight inches thick, 1,142.93 cubic yards of compacted, or, 1.564 cubic yards of loose gravel are required, and in order that the best results may be obtained, there must be competent supervision not only in the mixing of the materials employed in the building of the reads of the several types, but in the placing of materials.

There are 2,000,000 miles of what are commonly called "dirt roads" in the United States, and to make them effective there must be proper drainage, such grading and alignment as will make them fit for the traffic and constant surface betterment, and it is nothing short of criminal waste to build roads of macadam and expect them to take care of themselves. Undoubtedly the best system of maintenance for all roads is that which provides for the permanent and sometimes continuous employment of skilled laborers who have charge of particular sections of road, or who may be assigned to any part of the county or other road unit where there is work most needed.

Canadian Stone Highway. A stone highway, to cost \$600,000, is to be built from Ottawa, Canada, 60 miles south to the St. Lawrence river international boundary. It is stated that the road is to be built as a memorial to the late J. P. Whitney, premier of Ontario.

All-Year-Round Roads. Good roads help small towns; railroads build up the great cities, but all-the-year-round roads turn the stream of wealth, travel and business back towards the rural centers.

# WASHINGT

# American Flag Under Lions That Look British

W ASHINGTON.—Four bronze lions, said to be exact copies of those on the Trafalgar square Lord Nelson monument in London, couchant on flags presumed to be the American colors, form a group on the Grant monument in



the Botanic garden, which is attracting much comment at present because of the un-American idea the lions convey by reason of their position over the flags. Although the group has been in position for some time, this peculiar feature has apparently escaped notice until recently. The additions just being made attracted closer attention. however, from the casual observer.

The figures of the lions which have given rise to comment form the centerpiece of the monument. This

section, therefore, is the most conspicuous. The center is raised, and on this elevated base is the large tablet on which the inscription is to be placed. Around this base, at each of the four corners, is a crouching lion, under whose body is stretched a flag, which, by the American eagle forming the head and by the fact that it is a monument to an American hero, might be taken to be the American standard.

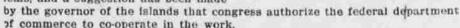
The fact that the lions are copies of the British lions on the Trafalgar square monument in England and the sight of the flag stretched under their bodies has caused many tourists and other observers to wonder just what the motif of the group is intended to express.

To an artist perhaps the proud attitude of the crouching figures might convey an air of heroic protection, but to the ordinary mind this same proud appearance might mean haughty possession, and it is this latter impression, probably, which has caused the inquiries to be raised.

# Commerce Department Talks of Volcano Foundry

PROPOSED novel co-operation with nature in a manufacturing enterprise. A whereby the great volcano of Kilauea of the island of Hawaii would be made to serve as a gigantic foundry for casting sewer pipe and bricks, is

arousing interest among officials of the United States department of commerce. This interest is not only in the scheme as a general commercial feature affecting production and freight movements in territory comprising the United States. Every effort is being made by the territorial government to foster other industries than the dominant ones of sugar profuction and pineapple canning in order to solve pressing economic problems, and a suggestion has been made



The possibilities of casting sewer pipe from the molten lava of the volcano have been studied by a retired pipe manufacturer from the United States who recently visited the islands, and he has even suggested details of the procedure by which buckets of exceedingly refractory material on an endless chain would bring the molten lava from the bed of the crater to its rim, where the pipes would be cast. Buckets capable of resisting 2,000 degrees Fahren heit easily can be provided, it is declared, while the temperature of the lava has been found from scientific observations to be about 1,800 degrees. At such a high degree of heat the lava, it is believed, would remain liquid during the short time necessary to transport it to the molds.

Though the plan is so out of the ordinary that it sounds almost visionary to the layman, it is explained to the commerce department by its agents in Hawaii that Kilauea presents one of the best opportunities known anywhere In the world for industrial utilization of the earth's natural heat

# Senator Reed's Secretary Bests the Constable

**D** ON HUNT of Kansas City, secretary to Senator Reed, is the hero of District of Columbia autoists by reason of his victory over Maryland constables who arrested him Sunday for driving his "flivver" into the state without a Maryland



license. Hunt's machine was adorned with Washington and Missouri tags, but the Maryland officials held that this was not sufficient. They escorted Hunt to a justice of the peace, who promptly assessed a fine of \$5. Hunt demanded to be shown the section under which he had been penalized. It was produced with the result that Hunt pointed out to the J. P. that as a nonresident he was entitled to drive through Maryland seven times without a license.

I DIDN'T KNOW I

HAD TO BE A

CAMEL AN' A

"I am willing to take oath that this is my second invasion of Maryland," said Hunt. The J. P. perused the law and reluctantly handed back the fine. Under a recent decision of the Supreme court of the United States residents of Washington are required to have both Virginia and Maryland licenses in addition to the District tax if they desire to tour the neighboring commonwealths. Hunt, however, has convinced the Marylanders that this ruling does not apply to Missourians unless they exceed the tourist limitations.

### Col. Harts Training His Watchmen to Be Camels

OL. W. W. HARTS, superintendent of public buildings and grounds, who is an advocate of preparedness, is putting his "watchman's brigade" at the state, war and navy building through a course of training for service in northern Mexico or any other old waterless

waste where they may be needed. As one of the features of the course, the colonel has removed all the watercoolers from the corridors.

And as the watchmen must now walk through miles of corridors and I up and down long flights of stairs to get water, the result is twofold: Most of the men are developing a remarkable endurance against thirst, while others-those who must have waterare developing the muscles they would

have to use on long marches and mountain climbing. in a sense, also, the "brigade" is getting practice in the use of firearms. Ever so often in the week, usually after the departments are closed for the day, the colonel gets his assistant to turn in a fire alarm in some remote corner of the building.

Thereupon thirty-odd watchmen in brass buttons and blue coats go tearing through corridors and bounding up stairways carrying fire extinguishers. Monday afternoon, however, is the time when the colonel takes greatest pride in his brigade. Promptly at 3:30 o'clock, the members of the "brigade"

line up on the lot back of the state, war, and navy building, and are inspected. The colonel, with his assistant acting as adjutant, walks slowly along the line in front of the tree, and then along the line in back of the men, inspecting the hang of their clothes and the erectness of their carriage

#### CONDENSATIONS

States than students in colleges and of Olives, Jerusalem, there are olive universities

The orange was originally a pear- in 1099. shaped fruit about the size of the common wild cherry. Its evolution is 1,200 years of cultivation.

divide by two.

Brazilian cocoanut palms live from 600 to 700 years, and the date paim There are more insane in the United from 200 to 300 years. On the Mount trees known to have been flourishing

The physical effort of opening a case in which he was chief counsel believed by naturalists to be due to proved too much for Sir Edward Carson at London the other day, the pity To tell the size of a hat, hatters of the thing being that he had time add together the number of inches to deliver only 252,000 words of his in the long and short diameter and brief before his voice and strength failed him.